MINUTES
of the
FOURTH MEETING
of the
WATER AND NATURAL RESOURCES COMMITTEE

October 15-16, 2013
New Mexico State University (NMSU) Golf Course Banquet Room
Las Cruces

The fourth meeting of the Water and Natural Resources Committee was called to order at 9:05 a.m. on October 15, 2013 by Senator Phil A. Griego, chair, in the Banquet Room at the NMSU Golf Course in Las Cruces.

Present
Sen. Phil A. Griego, Chair
Sen. Joseph Cervantes (October 15)
Rep. Brian F. Egolf, Jr.
Rep. Larry A. Larrañaga
Sen. Sander Rue
Sen. Benny Shendo, Jr.
Rep. Mimi Stewart (October 15)
Rep. Don L. Tripp
Sen. Peter Wirth

Absent
Rep. George Dodge, Jr., Vice Chair
Rep. Phillip M. Archuleta
Rep. Paul C. Bandy
Rep. William "Bill" J. Gray
Rep. Dona G. Irwin
Rep. Emily Kane
Sen. George K. Munoz
Sen. Cliff R. Pirtle
Rep. James R.J. Strickler
Sen. Pat Woods

Advisory Members
Rep. Cathrynn N. Brown
Sen. Carlos R. Cisneros
Rep. Sharon Clahchischilliage
Sen. Lee S. Cotter
Rep. Anna M. Crook
Rep. Candy Spence Ezzell (October 15)
Sen. Ron Griggs
Rep. Rodolpho "Rudy" S. Martinez
Sen. Cisco McSorley
Sen. Mary Kay Papen
Sen. Nancy Rodriguez
Sen. William E. Sharer
Rep. Jeff Steinborn (October 15)
Rep. Bob Wooley

Sen. Pete Campos
Rep. Gail Chasey
Rep. Nora Espinoza
Sen. Stuart Ingle
Sen. Gay G. Kernan
Rep. James Roger Madalena
Rep. W. Ken Martinez
Sen. Steven P. Neville
Sen. Gerald Ortiz y Pino
Sen. John C. Ryan
Rep. Henry Kiki Saavedra
Rep. Tomás E. Salazar
Sen. John Arthur Smith

Guest Legislators
Rep. Sandra D. Jeff (October 16)
Sen. Linda M. Lopez (October 15)

Staff
Jon Boller, Legislative Council Service (LCS)
Gordon Meeks, LCS
Jennifer Dana, LCS

Guests
The guest list is in the original meeting file.

Handouts
Handouts and other written testimony can be found in the meeting file or on the New Mexico Legislature's web site at www.nmlegis.gov.

Tuesday, October 15

Call to Order, Introductions and Welcome
Senator Griego began the meeting by having members of the committee introduce themselves. Gregory Fant, deputy provost, NMSU, welcomed the committee on behalf of NMSU President Garrey Carruthers and the faculty, staff and students of NMSU.

How the Rio Grande Compact Functions
Phil King, Department of Engineering, NMSU, and consultant for the Elephant Butte Irrigation District (EBID), gave a brief history of water management in southern New Mexico and explained that disagreements between Mexico and the United States in the late 1800s led to a treaty with Mexico in 1906 requiring the delivery of at least 60,000 acre-feet of water annually to Mexico. Between 1905 and 1916, Elephant Butte Dam, as part of the Rio Grande Project, was constructed, he explained, and the project apportioned water from the reservoir to irrigation districts in New Mexico (the EBID) and Texas (El Paso County Water Improvement District No. 1 (EPD#1)), along with Mexico's water. He said that the Rio Grande Compact was not ratified until 1939, and it apportions Rio Grande waters to Colorado, New Mexico and Texas. The delivery point for Texas' water, as well as Rio Grande Project water, is Elephant Butte Reservoir. Dr. King said that drought was not adequately factored into the compact negotiations, so New Mexico suffers disproportionately in dry years. Projections are that the climate in the Southwest will get drier and hotter in the coming years, with declining average precipitation and increasing variability, he explained.

Rolf Schmidt-Petersen, Interstate Stream Commission (ISC), noted that New Mexico has eight compacts dealing with the interstate allocation of water and that each one is unique in how water is allocated, measured and administered, making direct comparisons of the compacts very difficult. There are 200,000 acres of irrigated land between the northern and southern borders of New Mexico on the Rio Grande, he said, and snowpack is responsible for about 80 percent of the flows of the Rio Grande in the area covered by the Rio Grande Compact. Flows vary greatly, and under the compact, a certain percentage of the natural flows passing Otowi Gauge may be used in the middle Rio Grande region, with the rest going to Elephant Butte Reservoir, the delivery point

for Texas' (and the EBID's) portion of compact water, he explained. New Mexico can accrue credit water when it delivers more water to the reservoir than is required under the compact, he said, and this credit water can be used to fulfill compact obligations in times of shortage. The state spends about $2 million per year to keep an 18-mile channel open to make sure water makes it down to Elephant Butte Reservoir, he noted.

Issues in Litigation — *State of New Mexico v. U.S., et al.,* and *State of Texas v. State of New Mexico and State of Colorado*

Steve Hernandez, attorney for the EBID, gave a brief history of the Rio Grande Project and explained that in 2008, the EBID, EPD#1 and the U.S. Bureau of Reclamation entered into an operating agreement that describes how the bureau will handle the allocation of project water accounting for both districts. He said that 2008 operating agreement removed the threat of a lawsuit by Texas over the effects of ground water pumping in the lower Rio Grande region and ensured that EPD#1 gets the water it has ordered from reservoirs in New Mexico. In *New Mexico v. United States, et al.*, he explained, New Mexico claims that the Bureau of Reclamation has changed the allocation of project water to favor Texas and erred in its accounting of Rio Grande Compact water. That case, he noted, has been stayed pending a ruling by the U.S. Supreme Court in *Texas v. New Mexico and Colorado,* in which Texas claims that Texas is not receiving its share of compact water that is allocated by the Rio Grande Project. If Texas prevails in this action, he said, New Mexico could be liable for both monetary damages and penalty water delivery requirements to Texas, and ground water pumping in the EBID could be curtailed.

Sarah Bond, Office of the Attorney General, outlined the state's case against the Bureau of Reclamation in *New Mexico v. United States, et al.,* noting that the 2008 operating agreement violates several federal laws, including the National Environmental Policy Act of 1969 (NEPA), the federal Water Supply Act of 1958 and the federal Administrative Procedure Act. The harms New Mexico endures in the lower Rio Grande, she said, include lost aquifer recharge, lost surface water allocation and storage, lost sustainable water supply for Las Cruces and other communities and lost renewable supply of water for farmers. In *Texas v. New Mexico and Colorado*, Ms. Bond explained, Texas alleges that New Mexico is unlawfully diverting water between Elephant Butte Reservoir and the New Mexico-Texas state line, thereby interfering with Texas' allocation of water under the Rio Grande Compact. New Mexico, she said, asserts that Texas' claims are not compact-based claims, but rather arise from an operational dispute about the Rio Grande Project, a dispute that is already being heard in federal district court and in the adjudication court in New Mexico.

Jay Stein, attorney for the City of Las Cruces, explained the city's position in the two cases, pointing out that the city's water supply is completely dependent on ground water, which accounts for only six percent of the ground water pumping in the lower Rio Grande. Las Cruces, he said, had planned to obtain surface water rights to supplement its water supply, as Albuquerque, Santa Fe, Gallup and other cities have done, in order to ensure a sustainable water supply. This never happened, he said, because the 2008 operating agreement has taken all the

surface water that would have been available to implement the planned conversion to municipal and industrial use. The Bureau of Reclamation never conducted a full NEPA review of the operating agreement before it signed and implemented the agreement, he explained, and consequently never considered the agreement's effects on Las Cruces or its population. Consequently, he said, the city is challenging the bureau's authority to implement the agreement. In the U.S. Supreme Court case, Mr. Stein explained, the city filed an amicus brief that asserts that the federal district court and the state adjudication court are already hearing all the issues necessary to resolve Texas' claims to water. He also noted that both he and Ms. Bond agree that there can be no damages awarded to Texas under the compact because there have been no underdeliveries of compact water.

Update on Statewide Precipitation and Reservoir Levels

Dave DuBois, New Mexico state climatologist, reported that the July through September "monsoon season" precipitation for the majority of locations in the state was greater than normal, and in three places, it was over twice normal levels. Despite the above-normal precipitation during the monsoon, he cautioned, much of the state is still below normal for the year in total precipitation. The total area of the state suffering from exceptional, extreme or severe drought has dropped from 98 percent three months ago to 37 percent as of October 8, he said, with less than four percent now enduring extreme drought conditions and none of the state in exceptional drought. The outlook for the winter, based on comparisons with other wet monsoon years, is that, overall, there is not a strong tendency for a wet winter, but, he said, at least it does not show to be drier than the long-term average.

Scott Verhines, state engineer, updated the committee on reservoir levels around the state, noting that those on the Pecos River improved the most following the rains in September.

Working with Water Users to Address Water Shortages

Mr. Schmidt-Petersen explained that, among all the crises and bad news that the drought has generated, there are also some examples of where the state and stakeholders have collaborated to address water shortages in a manner that meets both local needs and state law. The first example is how the Rio Chama Acequia Association (RCAA), Acequia Nortenas (AN), the Office of the State Engineer (OSE) and the ISC worked together to mitigate the effects of drought on users along the Rio Chama and ensure deliveries to downstream senior users. The second example involved balancing water use in the middle Rio Grande to meet the needs of farmers and cities while still protecting endangered species. This involved cooperation with the Middle Rio Grande Conservancy District (MRGCD), federal agencies, the ISC and OSE and others, he explained.

Fred Vigil, RCAA, explained that members of the RCAA hold water rights dating back to the 1600s, while many upstream users, such as AN members, have rights junior to RCAA members. Rather than cut off all upstream users, the RCAA and AN held public meetings, along with OSE and ISC staff, to find ways to share what water was available and to reduce diversions to keep water in the river for downstream users. The RCAA, he said, also worked with the OSE

and ISC staff, the Jicarilla Apache Nation and the MRGCD to purchase San Juan-Chama Project water to offset consumption of water. He stressed the need to continue to work together to have plans in place to deal with shortages long before the issue arises.

David Gensler, MRGCD, described how the MRGCD functions, noting that when it was created, it inherited the irrigation operations of about 80 local ditches and six pueblos, and that now it covers an area of about 250,000 acres, with delivery of water to about 60,000 acres. El Vado Reservoir, he explained, serves as storage for the project, noting that it can only store about 10 percent of what Elephant Butte Reservoir can store and that the last time El Vado was full was in 2010. Currently, he said, El Vado is nearly empty, with the 25,000 acre-feet that is stored there going to fulfill Rio Grande Compact obligations. Between 1996 and 2000, he said, the MRGCD reduced its diversion by 40 percent, which helped it get through the drought and meet the needs of the endangered silvery minnow. However, by 2013, conditions had worsened, he explained, and it was not possible to meet the goals established in the early 2000s. By meeting and working together, stakeholders, the MRGCD and state and federal government agencies developed a plan to provide for a surge of water for minnow propagation without using a drop of water from irrigators and avoid litigation by doing so. Both Mr. Gensler and Mr. Vigil stressed the importance of working together to find alternatives to cutting off users in times of shortage and of planning in advance.

Review of State and Regional Water Plans, the Water Trust Fund and Funding Through the Water Project Fund by the Water Trust Board

Mr. Verhines outlined the process by which water infrastructure projects are funded and explained how the current process is often very difficult for applicants and is often inefficient when it comes to putting available funds to work immediately. He proposed streamlining the process to make certain that those projects that are approved for funding in any particular year can actually be started as soon as the money becomes available. He explained that this would help avoid situations where money is committed to a project that is not yet ready to begin, sometimes for years, while other projects that could be started or completed cannot be started or completed because funds are already tied up. Mr. Verhines also stressed the importance of planning and maintenance of water systems.

Estevan Lopez, director, ISC, gave a brief history of water planning in the state, noting that, in part, the regional water plans were established in reaction to a lawsuit by Texas in the 1980s over the export of water out of state. The legislature appropriated $400,000 in 2013 to begin the process of updating the 16 regional plans and the state water plan, he said, and the ISC wants to complete that process by 2015. Mr. Lopez explained that the ISC will first develop a common technical platform for the plans by providing supply and demand information and background on legal issues for each region in consultation with each region. Second, stakeholder steering committees from each region will prioritize projects and develop their respective plans and provide a link between the regional plans and the state plan.

Steve Moise, state investment officer, updated the committee on the status of the Water Trust Fund. He explained that if the current distribution formula is not changed, or if more money is not deposited in the fund, given average investment returns there is better than a 50 percent chance that the fund will shrink to zero dollars in 20 years. Assuming better-than-average returns, the fund could survive 30 years, but it is still likely not self-sustaining, he said. Possible fixes could include either additional legislative appropriations to the fund or a reduction in the annual distribution amount, he suggested.

Eileen Dodds, secretary and treasurer of the New Mexico Water Dialogue (NMWD), expressed concerns that the NMWD has regarding the regional water planning process. In particular, Ms. Dodds pointed out, the ISC did not include the many people involved in the development of the original Regional Water Planning Handbook when it decided to update the regional water plan template. The NMWD believes it is important for regional representatives to have input into this process, she said, noting that community participation in the planning process is essential to common understanding, which promotes "buy in" by the community. Ms. Dodds closed by saying that she was encouraged by Mr. Lopez's comments indicating that the ISC will now be including public participation in the template update process.

Hispanic Farmers and Ranchers of America (HFRA) Presentation

Oscar Vasquez Butler, member, HFRA, said that the historical water rights of Hispanic and non-Hispanic people in southern New Mexico are not being recognized by the OSE, even though such rights have been recognized in northern New Mexico. Mr. Vasquez Butler explained that acequias in the Mesilla Valley, such as the Acequia Madre, were irrigating in 1842, which predates state engineer jurisdiction and the development of the Rio Grande Project. Scott Boyd also spoke on the issue, saying that the current adjudication of the lower Rio Grande is not properly recognizing that local community ditches had already appropriated the waters of the Rio Grande prior to 1896, long before federal claims to the water arose.

The committee recessed at 5:00 p.m.

Wednesday, October 16

Senator Griego reconvened the meeting at 9:10 a.m.

Humate Mining and Water Conservation

Michael Farmar, president of Horizon Ag-Products, explained how humate is used to amend soil and that it can help reduce water use by 10 percent by increasing water infiltration and reducing water runoff from fields. He said that it should not be considered a mineral and that current mining laws make it difficult to become a reliable supplier of humate on the world market. He asked the committee to support legislation exempting humate from the New Mexico Mining Act.

Process for Removal of Cattle from Forest Lands in Drought

Caren Cowan, New Mexico Cattle Growers' Association, described how the U.S. Forest Service in the Mountainair Ranger District (MRD) required the removal of all cattle from the grazing allotments in that district last summer and that under new regulations, there was no appeal allowed for that decision. Permit owners have not been allowed to restock their allotments since then, she explained, even though range conditions have improved. Sam Smallidge, Range Improvement Task Force (RITF), submitted a letter to the committee that outlined the sequence of events and indicated that the RITF and the New Mexico Department of Agriculture are collecting data on the allotments and meeting with permit owners to discuss their desire to assess range conditions and engage the MRD on restocking their allotments. Representatives for the U.S. Forest Service were unable to attend the meeting due to a shutdown of the federal government. The committee requested that a letter be drafted for approval at its next meeting.

Treatment of Water for Uranium Contamination

Jaime Geronimo Vela, doctoral student, NMSU, and Dr. Antonio Lara, professor of chemistry, NMSU, presented the results of their research on the use of clay pellets to remove uranium and other contaminants from drinking water. They explained that there are 54,000 people living on the Navajo Nation that do not have access to potable public water, and the federal Environmental Protection Agency is spending $2 million a year trucking water to Navajo residents whose water is contaminated with uranium. Their solution, they explained, would allow treatment of water at the household level at much less cost. Dr. Lara added that the use of the clay pellets they have developed will treat any water resources. Dr. Robert Marquez demonstrated how the system works and how the pellets are made, noting that the World Health Organization has approved it as a method for also removing pathogens from water.

Hydraulic Fracturing and Produced Water Reuse

David Martin, secretary-designate, Energy, Minerals and Natural Resources Department, presented current and historical data on oil and natural gas drilling and production in the state, state revenue attributable to oil and gas production, background on hydraulic fracturing and horizontal drilling and data on produced water volumes from oil and gas wells. Mr. Martin said that he is the chair of the administration's recoverable water initiative, which is exploring ways to reduce reliance on and depletion of fresh water aquifers and surface water sources and to develop a regulatory environment that encourages recycling and reuse of fracturing fluids and oil-field-produced water.

The committee adjourned at 12:35 p.m.